County Pathology Ltd

Laboratory User Guide 2014-2015

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Request Requirements

To minimise confusion and error in the laboratory we have user specific request forms, with an area devoted to common requests from a particular doctor or clinic. New users need to set this up or use our generic request form. We require a minimum of 3 identifiers on the form and the samples. We suggest Forename, Surname and Date of Birth or Unique patient ID number (e.g. Clinic number). Please write the date and time of collection on the form and sample together with any relevant clinical information and clearly indicate the tests required. The laboratory is able to correct minor spelling errors, but samples that do not meet our labelling criteria will be rejected. The request form needs to be completed and include any relevant clinical information, drugs and, where applicable, the site where the sample was taken from. Anonymous samples can be processed but we require the patient's initials, their date of birth and a unique identifier, such as a clinic number. Samples that are sent out of the EU or require genetic testing will require patient consent and suitable forms can be supplied. Samples that are classed as high risk must be clearly labelled on the form and the sample container (High risk stickers are available). Please note that the laboratory is unable to handle Group 4 pathogens, these will be incinerated without opening.

Samples are generally stored for 1 week unless longer term storage is requested. Additional tests can be requested on these samples by phoning 01483-450-388 or e-mail to info@countypathology.co.uk. Please note that verbally requested tests will not be released until written confirmation is received.

Advice

The laboratory can provide advice on using the laboratory correctly (Including testing protocols, special precautions, and reference ranges) and provide specialist clinical advice and interpretation. Should you require this service please contact Bill Wreford on 01483-450-388.

Sample Transport

The way in which samples are transported to the laboratory depends on the type and speed of testing required. We can arrange for same day or overnight couriers, and postal services. Please contact the laboratory to arrange the best solution for your needs.

Referral Laboratories

While we endeavour to do as many tests on site as possible we cannot offer them all. If you request a test we do not do on site we will refer it to the laboratory of your choice or to one we have selected which offers the most cost effective high quality service.

Useful Information

Reports

Results for most routine tests we carry out on site are normally available within 3 hours of arrival in the laboratory.

Report formats can be tailored to an individual clients requirements with single or cumulative versions available. We can also produce a graphical report for an individual test to show how values change over time. This is useful with tests such as tumour markers that are used to follow a patients treatment.

The normal/therapeutic/risk ranges are printed on the report and are adjusted for age and sex. All results outside these ranges are flagged and highlighted in red.

Our reports are printed on A4 paper and they can be posted, faxed or sent as an encrypted .pdf attachment to an e-mail.

If you require additional tests on a sample our minimum storage time is 7 days so please contact us as soon as possible. Long term sample storage can be provided if required.

Transport Methods

All samples coming to the laboratory must be packaged to a high standard of containment and in such a way as to contain the contents in the event of a breakage if they are roughly handled or dropped. Pathology samples may contain infectious material and should be treated with care.

Samples should be transported in a suitable transport container designed for the purpose with sufficient absorbent material to absorb the entire liquid content. This should be placed in a zip lock bag. The request form should be placed in a separate pouch.

If the samples are being taken by hand to the laboratory they should be placed in either a transparent transport box (to allow examination prior to opening), with the lid securely sealed or they should be sealed in a suitable envelope. In the event of a leak being detected place the transport container in a plastic bag and take it directly to the laboratory for safe disposal.

If the samples are to be posted then pack as above using a suitable envelope and attach an address label with a UN3373 warning (available from the laboratory). If a large number of samples need to be posted we can provide suitable transport boxes.

If you require help setting up your own sample collection and handling procedures then please contact the laboratory and we can provide you with specimen policies that meet our requirements.

Useful Information

Laboratory Times

The laboratory is staffed between 08:30 and 17:00 Monday to Friday and between 09:00 and 13:00 on a Saturday. Telephone support is available outside these hours on 01483-450-388.

Samples can be left at the laboratory outside normal working hours.

Phlebotomy Times

Phlebotomy appointments are available Monday to Friday and between 08:30 and 16:30 and by special arrangement outside these times. A phlebotomy charge of £10.00 will be made for regular users or the patient can self-pay £15.00. Invoices can be sent to the referral clinic, to the patient or to the patient's insurance company. We can arrange home visits across the UK with prices between £50 and £100 depending on the location.

Customer Feedback

We value and welcome feedback from our customers. If you have any comments or suggestions please let us know as it is always useful for planning and improving our service. Please use Feedback Box in reception or the contact form on the website.

Quality Assurance and Accreditation

County Pathology is committed to providing a high quality service based on the standards set by the CPA (ISO 15189) and The Care Quality Commission. All our services are overseen by a consultant with suitable specialist qualifications and each test is regularly assessed against internal quality control samples and external quality assurance samples and our performance is peer reviewed.

Haematology

Haemoglobin (Hb) Red Cell Count (RBC) Packed Cell Volume (PCV) Mean Cell Volume (MCV) **Platelets** White Blood Cells (WBC) White Cell Differential



ESR

Liver Function

Albumin Protein Bilirubin ALP ALT AST GGT LDH

Kidney Function

Albumin Protein Sodium Potassium Urea Creatinine



Bone Profile

Albumin Protein Calcium Phosphate ALP Uric acid



3 hours

3 hours

3 hours

3 hours

Lipid Profile

Cholesterol Triglycerides HDI LDI Lipid Profile



Biochemistry

Liver Function Kidney Function Bone Profile Glucose Iron Lipid Profile











Biochem/Haem

Haematology **Biochemistry**





Anaemia Profile

Haematology Serum Iron Ferritin Transferrin B12/Folate







Well Person

Biochemistry Profile Haematology Profile FreeT4 & TSH **CRP**





Well Man

Well Person **PSA**





Well Woman

Well Person Anaemia Profile CA 125





Cardiac Risk

Well Person Profile Lipoprotein (a) High sensitivity CRP Homocysteine Insulin





3 hours

3 hours

3 hours

1 day

60+ Male

Well Person **PSA** HbA1c Occult Blood Vitamin D





60+ Female

Well Person CA 125 HbA1c Occult Blood Vitamin D







Thyroid 2

Free Thyroxine (Free T4) Free Triiodothyronine (Free T3) Thyroid Stim' Hormone (TSH) Thyroidperoxidase antibodies



Infertility

LH (Luteinising hormone) FSH (Follicle stim' hormone) Prolactin Oestradiol (Oestrogen)







Biochemistry

		Diccilci	Thou y		
Test	Sample	TAT	Test	Sample	TAT
ACE	0	1 day	HDL Cholesterol	1	3 hrs
Albumin	0	3 hrs	Homocysteine	1	3 hrs
ALP	0	3 hrs	lgE	1	3 hrs
ALT	0	3 hrs	Immunoglobulins (IgG, IgM, IgA)	1	1 day
Amylase	0	1 day	Iron	1	3 hrs
AST	0	3 hrs	Iron studies (Fe Transferrin & Ferritin) •	3 hrs
Bence-Jones Protein	RU	3 days	LDH	1	3 hrs
Beta 2 Microglobulin	0	2 days	LDL	1	3 hrs
Bicarbonate	1	3 hrs	Lipoprotein (a)	1	1 day
Bilirubin	1	3 hrs	Lipase	1	1 day
BNP (NT-proBNP)	0	3 hrs	Magnesium	1	3 hrs
Calcium	1	3 hrs	Microalbumin:Creatinine (Urine)	RU	1 day
Ceruloplasmin	1	2 days	NT-proBNP	0	3 hrs
Chloride	0	3 hrs	Phosphate	1	3 hrs
Cholesterol	1	3 hrs	Potassium	1	3 hrs
CK	0	3 hrs	Protein total	1	3 hrs
Copper	0	3 days	Protein:Creatine (Urine)	RU	1 day
Creatinine	0	3 hrs	Protein electrophoresis	1	3 days
CRP-HS	0	3 hrs	Sodium	1	3 hrs
Electrolytes (Serum)	0	3 hrs	Transferrin	1	3 hrs
Electrolytes (Urine)	24U	3 hrs	Triglycerides	1	3 hrs
Ferritin	0	3 hrs	Troponin T	•	3 hrs
Gamma GT	0	3 hrs	Urea	1	3 hrs
Glucose	0	3 hrs	Uric acid	1	3 hrs
HbA1C	0	1 day			

Haematology 9						
Test	Sample	TAT	Test	Sample	TAT	
aPTT	1	3 hrs	Thalassaemia screen	0	3 days	
Blood Group	0	3 hrs	Vitamin B12	0	3 days	
Blood film	1	3 hrs	Von Willebrands screen	1	3 days	
Clotting Screen	1	3 hrs	Thrombosis	Clotting	Porcon 1	
Coombs' Test (DAT)	1	3 hrs		Clotting S	Screen i	
Erythropoeitin	1	3 days	Lupus screen	PT		
ESR	0	3 hrs	Proteins C & S	aPTT		
FDP's/D-Dimer	0	3 hrs	Antithrombin III	1		
Fibrinogen	1	3 days	Factor V Leiden			
Folate (Red Cell)	1	3 days	Prothrombin Mutation			
Folate (Serum)	1	3 days	MTHFR Gene			
Full Blood Count	1	3 hrs	Homocysteine			
G6PD	1	3 days	3 1 1			
Group & Red Cell Antibody Screen	1 1	3 days	E days		0 h	
Haemoglobin electrophoresis	1	3 days	5 days		3 hours	
INR	1	3 hrs	Clotting Screen 2	Anaemia	Screen	
IM screen	1	3 hrs	PT			
Malarial Parasites (Incl FBC)	1	3 hrs	aPTT	Haematology		
Protein C	1	3 days	Fibrinogen	Serum Iron		
Protein S	1	3 days	FBC	Ferritin		
Prothrombin time	1	3 hrs		Transferrin		
Reticulocytes	0	3 hrs	10	B12/Folate		
Schistosome antibodies	0	3 days				
Sickle Cell Haemoglobin Screen	0	3 days		00		
Thrombosis risk screen	300	3 days				
			1 day		1 day	

Test 17 Hydroxy Progesterone ACTH AFP (Alpha-fetoprotein) Aldosterone (Off drugs for 2 weeks)	Sample 1	TAT 3 days	Test	Sample	TAT
ACTH AFP (Alpha-fetoprotein)	0	_	Tastastarana		
AFP (Alpha-fetoprotein)		0 1	Testosterone	1	3 hrs
		3 days	Testosterone-Free	1	3 days
Aldosterone (Off drugs for 2 weeks)	1	3 hrs	Thyroxine-Free (Free T4)	1	3 hrs
) 1	3 days	Thyroid Stimulating Hormone	(TSH) 0	3 hrs
Androstenedione	1	3 days	Triiodothyronine-Free (Free T3	1	3 hrs
Antidiuretic Hormone (ADH)	1	3 days	Thyroid profile 1	1	3 hrs
Antimullerian Hormone (AMH)	1	3 days	Thyroid profile 2	1	3 hrs
Beta-HCG	1	3 hrs	Thyroid 1	Thy	roid 2
Urine Catecholamines	24U	3 days			
Cortisol	1	3 hrs	Free Thyroxine (Free T4)	Free T4	
DHEA Sulphate	1	3 days	Thyroid Stim' Hormone (TSH)	TSH	
Dihydrotestosterone	1	3 days	0	Free T3	L Al
FSH (Follicle stimulating hormone)	1	3 hrs		Thyroidperoxic	lase Abs
Growth Hormone	1	3 days		1	
IGF-1 (Somatomedin)	1	3 days	3 hours		3 hours
Insulin	1	3 hrs		NA-1-1	
Inhibin B	1	3 days	Day 3 Female	Male	nfertility
LH(Luteinising hormone)	1	3 hrs	LH	LH	
Melatonin	1	3 days	FSH	FSH	
Oestradiol	1	3 hrs	Prolactin	Prolactin	
Parathyroid hormone	1	3 days	Oestradiol	Free Androger	ı Index
Progesterone	1	3 hrs	Testosterone	Testosterone	
Prolactin	1	3 hrs	SHBG	SHBG	
Renin (Off drugs for 2 weeks)	1	3 days	1		
SHBG	1	3 hrs	3 hours	U	3 hours

Serology

Test	Sample	TAT
CMV abs (Cytomegalovirus) IgG/N	M •	3 days
EBV Profile	0	3 days
Helicobacter pylori IgG	0	3 days
Hepatitis A IgG/IgM	0	3 days
Hepatitis B Core Ab Total	0	1 day
Hepatitis B markers	0	3 days
Hepatitis B Surface antibody	1	1 day
Hepatitis B Surface antigen	0	1 day
Hepatitis B Viral Load	1	3 days
Hepatitis C IgG	1	1 day
Hepatitis C Viral Load	0	3 days
Herpes I & II abs	1	3 days
HIV abs 1 & 2 and p24 Ag	1	1 day
HIV, Hep B, Hep C early detection	า. 🕕	3 days
HPV(Human Papilloma Virus)	0	3 days
Measles IgG	1	1 day
Measles IgM	1	3 days
Mumps IgG	1	1 day
Mumps IgM	1	3 days
Rubella IgG	1	1 day
Rubella IgM	1	3 days
Toxoplasma IgG/M	1	3 days
Syphilis IgG	1	3 days
Varicella Zoster IgG (Chickenpox)	1	1 day
Varicella Zoster IgM (Chickenpox)	1	3 days

Hepatitis Screen

Hepatitis B Surface antigen Hepatitis C IgG Hepatitis A IgG/IgM



Hepatitis B Profile

Hepatitis B Surface antigen Hepatitis B Core Total Abs Hepatitis B Core IgM Abs Hepatitis B 'e' Ag Hepatitis B 'e' IgG Hepatitis B Surface Ab



3 hours

3 hours

Immunity Screen

Measles IgG Mumps IgG Rubella IgG Varicella Zoster IgG



Lyme Screen

Borrelia IgM Borrelia Immunoblot



3 hours

5 days

Bacteriology

Test	Sample	TAT
Blood culture	BC	3 days
Chlamydia PCR	PCR	3 days
Clostridium Difficile toxin-Faeces	RF	3 days
Faeces (M C & S)	RF	3 days
Fugal Culture and ID	PL	14 days
IUD	PL	3 days
Legionella-Urine	PL	1 day
MRSA by PCR	TS	1 day
MRSA by PCR x 5	TS	1 day
MRSA by culture	TS	2 days
Mycology	PL	14 days
Schistosoma-Urine	PL	3 days
Sputum-Routine	PL	3 days
Sputum & TB	PL	8 weeks
Swabs (Any Site)	TS	3 days
Synovial fluid	PL	3 days
TB culture	PL	8 weeks
TB Quantiferon	С	3 days
Urine (Protein glucose M C & S)	MSU	3 days
Urine microscopy	PL	3 hours
High Vaginal Swab	TS	3 days

Full Urine Screen

Chlamydia trachomatis
N.gonorrhoea
Mycoplasma genitalium
Ureaplasma
Trichomonas vaginalis
Gardnerella vaginalis
Herpes Simplex I/II

FCU

Full Blood Screen

HIV I & 2 Abs HIV p24 Ag Hepatitis C Ab Hep B Sag Syphilis IgG/IgM



3 days

2 days

Chlamydia/GC

Chlamydia trachomatis N.gonorrhoea

FCU

2 days

Mi	nerals-Blood			Minerals-Urine	15
Test	Sample	TAT	Test	Sample	TAT
Aluminium	0	5 days	Arsenic	RU	5 days
Arsenic	0 / 0	5 days	Cadmium	RU	5 days
Cadmium	0 / 0	5 days	Chromium	RU	5 days
Chromium	•	5 days	Cobalt	RU	5 days
Cobalt	1	5 days	Copper	24U	5 days
Copper	1	5 days	Lead	RU	5 days
Lead	1 / 1	5 days	Magnesium	24U	1 days
Magnesium	1	1 days	Mercury	RU	5 days
Manganese	1	5 days	Nickel	RU	5 days
Mercury	1 / 1	5 days	Zinc	24U	5 days
Nickel	0	5 days			

5 days

Trace Metal Profile Aluminium Iron Zinc Copper Mercury Chromium Manganese Calcium Magnesium Cadmium Lead \$96.00 5 days

0

Zinc

Our IgE allergy tests are run on the gold standard Phadia platform. Allergens can be run as individual tests, mixes or as panels. The most common and useful panels are listed here.

We also offer an allergy screening service for £25.00, where the patient completes a questionnaire and is tested for the common inhalant allergens. An allergist will recommend further testing, if appropriate, based on the results of the questionnaire and the blood test.

Animals Pollens

Cat dander, Dog dander,
Horse dander, Rodent mix
(guinea pig, rabbit, hamster, rat,
mouse)

Birch, Grass mix (cocksfoot,
meadow, meadow fescue, rye,
timothy), Tree mix (alder, birch,
hazel, oak, willow), Weed mix
(dandelion, daisy, goldenrod,
mugwort, plantain)

3 days

Eczema 2

Cat dander, Dog dander, Nuts

1 mix (peanut, hazelnut, brazil nut,

almond), Nuts 2 Mix (pecan,

cashew, pistachio, walnut)

Eczema 1

Dust mites (D pteronyssinus, D farinae), Seafood mix (cod, salmon, tuna, mussel, shrimp/prawn), Food mix (wheat, milk, egg, fish, peanut, soybean)

Mite & Mould

Dust mites (D pteronyssinus, D farinae), Feather mix (goose, chicken, duck, parrot), Mould mix (alternaria, aspergillus, candida, cladosporium, helminthosporium, penicillium)

3 days

Food Screen 2

Chickpea, Lupine seed, Buckwheat, Soybean

Nuts 1

Peanut, Hazelnut, Brazil nut, Almond

Food Screen 1

Seafood mix (cod, salmon, tuna, mussel, shrimp/prawn), Nuts 1 mix (peanut, hazelnut, brazil nut, almond), Nuts 2 mix (pecan, cashew, pistachio, walnut), Food mix (wheat, milk, egg, fish, peanut, soybean)

3 days

16

Food Screen 3

Mustard seed, Poppy seed, Sesame seed, Sunflower seed

3 days

Nuts 2

Pecan, Cashew, Pistachio, Walnut

3 days

3 davs

3 days

3 davs

3 days

3 days

Allergy 17						
Peanut	Fish	Meats	Bee & Wasp			
Peanut Ara h1, Peanut Ara h2, Peanut Ara h3, Peanut Ara h8	Fish (cod), Mackerel, Salmon, Tuna	Beef, Chicken, Lamb, Pork	Bee venom, Bee Api m1, Wasp venom, Wasp Ves v5			
3 days	3 days	3 days	3 days			
Shellfish 1	Shellfish 2	Latex	Bakers Lung			
Crab, Crayfish, Lobster, Shrimp/prawn	Clam, Mussel, Oyster, Squid	Latex Hev b1, Latex Hev b3, Latex Hev b5, Latex Hev b6.01	Wheat, Rye, Alpha-Amylase			
3 days	3 days	3 days	3 days			
Egg & Milk	Cereals & Wheat	Oral Allergy 1	Oral Allergy 2			
Egg white (hen), Ovomucoid, Milk (cow), Casein	Cereal mix (wheat, oat, maize/corn, sesame seed, buckwheat), Gliadin (wheat), Gliadin ω5, Coeliac test (tTG)	Birch Bet v1, Peach Pru p3, Hazelnut Cor a1, Fruits mix (apple, pear, peach, cherry, plum)	Latex Hev b6.01, Avocado, Banana, Kiwi fruit			
3 days	3 days	3 days	3 days			

	Sample Requirements						
0	Gold	Serum Gel	3.5 or 5ml				
0	Lavender	EDTA	4 or 10ml				
1	Grey	Fluoride	2 or 4ml				
1	Light-Blue	Citrate	4.5ml				
0	Green	Heparin Gel	3.5 or 5ml				
0	Dark-Blue	Serum-Trace elements	5ml				
FCU	Plain 30 ml tu	Plain 30 ml tube First Catch Urine-5ml					
24U	Plain 30ml tuk	Plain 30ml tube 24 Hour Urine or 30ml aliquot with volume.					
RU	Plain 30 ml tu	Plain 30 ml tube Random Urine					
EMU	Plain 30 ml Tu	Plain 30 ml Tube Early Morning Urine					
MSU	Boric Acid Mic	Boric Acid Mid Stream Urine					
RF	Plain tube 30	Plain tube 30 ml Blue Random Faeces					
BC	Blood Culture	Bottle					
TP	ThinPrep Vial						
F	Formalin						
TS	Blue Transpor	Blue Transport Swab					
PCR	PCR Swab Pur	PCR Swab Purple-Female, Blue-Male					
VS	Green Virolog	y Swab					
PL	Plain 30ml tuk	oe e					
C	Contact Lab (Special Bottles)						

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